

## **CHFA ENERGY EFFICIENCY EFFECTIVENESS**

Energy efficiency effectiveness is strongly encouraged. An objective of the Connecticut Housing Finance Authority (“CHFA”) is to maximize thermal efficiency and energy conservation in all developments approved for funding, regardless of funding type. The Development Teams should prepare and submit a Thermal Efficiency and Energy Conservation Plan with the design development submission, which takes into consideration pre-development testing and energy audits of existing buildings, and data produced by pre-development testing and energy audits of existing buildings, and data produced by pre-development energy modeling for new construction and substantial rehabilitation projects, prepared by a Professional Engineer and/or Building Performance Institute (“BPI”)-, Residential Energy Services Network (“RESNET”) Home Energy Ratings Systems (“HERS”)- or EnergyStar®-certified Assessors/Raters.

### **1. Energy Efficiency Measures**

The Thermal Efficiency and Energy Conservation Plan should include a list of all energy efficiency (“EE”) measures included in the overall scope of proposed work.

### **2. Energy Use and Conservation Data for Minor, Moderate or Substantial Rehabilitations**

If the application is for the minor, moderate or substantial rehabilitation of existing buildings, as defined in Appendix E in the CHFA Standards of Design and Construction (“Standards”), the Thermal Efficiency and Energy Conservation Plan should include the following energy usage information (as applicable):

*Note: If tenants are responsible for utility costs, and usage information for all units is not currently tracked, a sample of information for 10% of the units may be used to estimate the total residential usage.*

#### **A. Current Energy Usage:**

1. Management/Common Area
  - a. Total Electrical Usage for the past twelve months in kWh
  - b. Total Natural Gas Usage for the past twelve months in MMBtu
  - c. Total Fuel Oil Usage for the past twelve months in Gallons
2. Residential Electrical Usage for the past twelve months in kWh
  - a. Total Electrical Usage for the past twelve months in kWh
  - b. Total Natural Gas Usage for the past twelve months in MMBtu
  - c. Total Fuel Oil Usage for the past twelve months in Gallons

#### **B. Projected Annual Energy Usage (net decrease or increase) upon completion of the proposed EE measures (as applicable):**

1. Management/Common Area
  - a. Total Projected Annual Electrical Usage in kWh
  - b. Total Projected Annual Natural Gas Usage in MMBtu
  - c. Total Projected Annual Fuel Oil Usage for in Gallons
2. Residential Electrical Usage
  - a. Total Projected Annual Electrical Usage in kWh
  - b. Total Projected Annual Natural Gas Usage in MMBtu
  - c. Total Projected Annual Fuel Oil Usage for in Gallons

C. Building Energy Performance Summary

1. Total current and projected Annual Consumption for heating, cooling hot water, lights, appliances and miscellaneous equipment in MMBtu/yr
2. Projected reduction in Annual Consumption in %
3. Projected Annual Savings in Dollars
4. Projected payback period (cost/benefit analysis)

**3. Energy Conservation Data for Gut Rehabilitations and New Construction**

If the application is for the gut rehabilitation of existing buildings, as defined in Appendix E in the Standards, or for new construction, the Thermal Efficiency and Energy Conservation Plan should include the following information:

A. HERS Index

1. Based on the EnergyStar® HERS Index Target Procedure, Version 3, the projected EnergyStar® HERS Index Target for the EnergyStar® Reference Design Home for the project
2. The projected HERS Index for the project ( $\leq$  EnergyStar® HERS Index Target listed above)

**4. Professional Engineer and/or Certified Assessor/Rater**

1. Consultant Name
2. Title
3. Firm Name/Address
4. Email Address
5. Telephone Number